

## **REMARKS**

### **INTRODUCTORY COMMENTS:**

In the Office Action under reply, the Examiner has acknowledged receipt of the amendment filed on June 10, 2003, and has withdrawn the previously issued objection to drawings and claims.

Nevertheless, the Examiner now objects to claims 11-13 under 37 C.F.R. §1.75(c) and rejects claims 1, 2, 4, and 11-16, as follows:

(1) Claims 1, 2, 4, and 11-13 stand rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,862,270 to Lopresti et al.; and

(2) Claims 14-16 stand rejected under 35 U.S.C. §103(a) as obvious over Lopresti et al. in view of U.S. Patent No. 5,337,361 to Wang et al.

Claims 3, 5-10 and 17-22 are considered allowable if rewritten in independent form to include all limitations of the claims from which they depend.

Applicants wish to thank the Examiner for discussing the outstanding objections and rejections via telephonic interview with applicants' representatives on October 22, 2003 and via subsequent telephonic follow-up. Tentative agreement was reached regarding subject matter that would be allowable, subject to final review by the Examiner. Accordingly, applicants submit that the objections and rejections are overcome by the above amendments to the claims and by the remarks that follow.

### **THE ABOVE AMENDMENTS:**

Claim 11, formerly depending from claim 1, has been rewritten in independent form to set forth a product-by-process claim that recites the steps of claim 1. Similarly, claims 12 and 13 have been redrafted to set forth product-by-process claims that depend from claim 11. In addition, claims 1 and 11 have been rewritten to indicate that the invention involves a pixel-based barcode that contains *evenly distributed user data such that each pixel of the barcode, on average, contains an equal fraction of the user data*. As pointed out by the Examiner, support for this amendment is found in the specification on page 9, line 11-15. Accordingly, no new matter has been introduced by any of the amendments, and entry thereof is proper.

### **STATUS OF THE CLAIMS:**

With the above amendments, claims 1-22 are pending, claims 1 and 11-13 are amended, and claims 2-10 and 14-22 remain unchanged.

### **CLAIM OBJECTIONS**

The Examiner has objected to claims 11-13 as being of improper dependent form. In response, applicants have redrafted claim 11 in independent form to set forth a product-by process claim directed to

a readable barcode. Similarly, claims 12 and 13 have been reworded to set forth product-by-process claims that depend from claim 11. Since claims 11-13 have been amended in compliance with M.P.E.P. §2173.05(p) and are clearly directed to the product, not the process, they are not objectionable under 35 U.S.C. §112, second paragraph. Withdrawal of this objection is proper and requested.

**THE 35 U.S.C. §102(B) REJECTION OVER LOPRESTI ET AL.:**

Claims 1, 2, 4, and 11-13 stand rejected under 35 U.S.C. §102(b) as anticipated by Lopresti et al. In issuing the rejection, the Examiner again points to various sections of Lopresti et al. as disclosing the elements of the claims. Notably, the Examiner cites column 7, lines 9-36, as disclosing the modulation of a "user data array using a two-dimensional pseudorandom array and formatting the data array to produce a two-dimensional barcode array." In addition, the Examiner points to FIG. 1 of Lopresti et al. as depicting recorded and printed user data that is distributed evenly across a portion of the printed medium.

As discussed in the specification of the subject application, on page 2, lines 10-21, and on page 9, lines 9-15, the invention relates to a novel barcode methodology in which data is *distributed evenly* across a barcode image. Because *each pixel of the barcode on average contains an equal faction of all the encoded information*, the resulting spread-spectrum barcode may be read in its entirety even if a significant faction or majority of the barcode is obscured. In contrast, Lopresti et al. contains no disclosure regarding a bar code that contains evenly distributed data. FIG. 1 of Lopresti et al. merely depicts an ordinary digital barcode printed on the same page as an analog data for a spreadsheet, word processing, or drawing. The barcode of Lopresti et al., like conventional barcodes described in the subject application on page 19, line 27-28, is localized and requires a blank "quiet area." There is no disclosure relating to the even distribution of data as set forth in the subject application. Thus, the claims have been amended to clarify that the term "distributed evenly" as recited in the claims requires *each pixel of the inventive barcode, on average, to contain an equal faction of user data*.

Since applicants and the Examiner agree that such a clarifying amendment render the claims impervious to any construction that covers the technology of Lopresti et al., withdrawal of the rejection is warranted and respectfully requested.

**THE U.S.C. §103(A) REJECTION OVER LOPRESTI ET AL. IN VIEW OF WANG ET AL.:**

Claims 14-16 stand rejected as obvious over Lopresti et al. in view of Wang et al. With respect to claims 14 and 15, the Examiner states that Lopresti et al. fails to teach or fairly suggest the obfuscation of up to 80% of the barcode. However, the Examiner cites Wang et al., column 4, lines 52-61, and FIG. 1B, as providing the omitted teaching. With respect to claim 16, the Examiner also recognizes that Lopresti et al. and Wang et al. fail to teach or fairly suggest that the obfuscation is caused by damage or partial destruction of the printed medium. Nevertheless, the Examiner contends that it is obvious to modify the

combined teachings of Lopresti et al. and Wang et al. to provide a more reliable system, wherein lost, damaged, or distorted information can be recovered.

Applicants again respectfully traverse this rejection for the same reasons set forth in applicants' previous response. In addition, Lopresti et al., as discussed above, fails to provide any disclosure concerning user data that is *distributed evenly* across printed medium. Since applicants and the Examiner agree that Wang et al. fail to teach or suggest this element, the deficiencies of Lopresti et al. remain. Accordingly, claims 14-16 are nonobvious over Lopresti et al. in view of Wang et al., and withdrawal of this rejection is warranted.

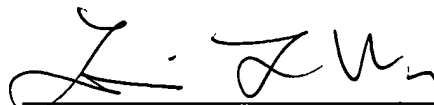
CONCLUSION

For all of the above reasons, it is submitted that the application comports with all formal requirements for patentability, and that the pending claims define an invention that is novel and nonobvious over the art. As the application should now be in condition for allowance, a prompt indication to that effect would be appreciated.

If there are any questions concerning this communication, the Examiner is welcome to contact the undersigned attorney at (650) 330-0900.

Respectfully submitted,

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